DOCUMENT RESUME

ED 021 281 24 CG 002 482

By- Robinson, Lora; Seligman, Richard
THE MEASUREMENT OF CAMPUS AND STUDENT MORALE. TECHNICAL REPORT.
California Univ., Los Angeles. Center for the Study of Evaluation of Instructional Programs.
Spons Agency- Office of Education (DHEW), Washington, D.C. Bureau of Research.
Report No- CSEIP-TR-4
Bureau No- BR-6-1646
Pub Date Apr 68
Contract- OEC-4-6-061646-1909
Note- 51p.
EDRS Price MF-$0.25 HC-$2.12
Descriptors- *COLLEGE STUDENTS, *MEASUREMENT INSTRUMENTS, TEST RELIABILITY, TEST VALIDITY
Identifiers- *College and University Environment Scales

Items for a morale scale were selected from Pace's College and University Environment Scales (CUES). The initial morale scale of 55 items was reduced to 22 items without substantially changing the dimension being measured. The scale discriminates among the 100 colleges in Pace's national sample, and its reliability is acceptable. The items-scale correlations, correlations between morale and the CUES scales, and comparisons of CUES and morale scores in terms of the ranges and means for each of Pace's eight institutional types indicate, in general, satisfactory psychometric properties. An item-factor analysis of the morale scale yielded five factors. Correlations with items from Astin's research and from the NORC study support the validity of the scale. (Author)

BR-6-1646
PA-24

Technical Report No. 4

THE MEASUREMENT OF CAMPUS AND STUDENT MORALE

by

Lora Robinson and Richard Seligman

with an Introduction

by

C. Robert Pace

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Center FOR THE
Study of
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University of California, Los Angeles, April 1968

CG 002 482

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The research and development reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education under the provisions of the Cooperative Research Program.

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CSEIP Technical Report No. 4, April 1968
University of California, Los Angeles

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ABSTRACT

Items for a morale scale were selected from Pace's College and University Environment Scales. The initial morale scale of 55 items was reduced to 22 items without substantially changing the dimension being measured. The scale discriminates among the 100 colleges in Pace's national sample, and its reliability is acceptable. The item-scale correlations, correlations between morale and the CUES scales, and comparisons of CUES and morale scores in terms of the ranges and means for each of Pace's eight institutional types indicate, in general, satisfactory psychometric properties. An item factor analysis of the morale scale yielded five factors. Correlations with items from Astin's research and from the NORC study support the validity of the scale.

INTRODUCTION

Morale has been a useful construct in the study of military and industrial organizations. It might also be useful in the study of colleges and universities. Military officers seek to generate high morale among their troops. Industrial managers seek to generate high morale among their workers. Good morale is related to good performance. The components of morale, both in the military and industrial setting, are roughly similar. Perhaps the same components are relevant for college and university organizations.

My own interest in the concept of morale goes back to 1937-40 when I was directing a follow-up study of former Minnesota students.[1] In the questionnaire sent to these students we included, among many other things, the Rundquist-Sletto scales for measuring General Adjustment and Morale, an adaptation of Hoppock's scale for measuring Job Satisfaction, and a set of locally developed items under the heading of Advantages of Your Job. We found, for example, that General Adjustment, Morale, Job Satisfaction, and Income all correlated positively with one another. When we compared people in the upper and lower fourths on the Job Satisfaction scale to see what aspects of their jobs were most related to satisfaction, we identified twelve elements: work possesses

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1. Pace, C. Robert. They Went to College. University of Minnesota Press, 1941.

prestige; appreciation shown for good work; work not too monotonous; work in line with abilities; contacts with many pleasant people; ample opportunity for initiative; credit for one's own work; job is responsible; friends approve of job; ample opportunities for advancement; advancement is relatively rapid; advancement is based on merit. In retrospect, it seems to me that many of these general findings might be applicable to the morale and satisfaction of college students. Student satisfaction and campus morale presumably would have some relationship to the feeling that what one is doing is responsible and important, is appreciated and rewarded, is approved by one's friends, provides opportunity for advancement, and is associated with interesting and stimulating people.

During 1943-47, when I was directing various research activities in the Bureau of Naval Personnel, we made a number of studies of job satisfaction and morale among Navy enlisted men.[1] We were also in close contact with Samuel Stouffer, Louis Guttman, and others who were making much more extensive morale studies in the Army.[2] The major components of morale, in both the Navy and Army studies, included such content categories as the following: attitude toward officers; pride in outfit; importance of mission; fair treatment; opportunity for advancement; and satisfaction with one's particular job. Again, in retrospect,

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1. Stuit, Dewey (Editor). Personnel Research and Test Development in the Bureau of Naval Personnel. Princeton: Princeton University Press, 1947.

2. Stouffer, Samuel, et al. The American Soldier, Volumes I, II, and IV. Princeton: Princeton University Press, 1949.

it seems to me that these same categories are relevant to the morale and satisfaction of college students: attitude toward professors and administrators, pride in one's college, the importance of learning, and the relevance, reward, and advancement in one's work.

Later, at Syracuse University, one of my doctoral students wrote a dissertation in which he reviewed and analyzed morale studies in military and industrial organizations, interviewed students, professors, and administrators noting what they said about "school spirit" and campus morale, and developed a suggested outline for measuring the morale and satisfaction of college students.[1] Moran's dissertation was particularly relevant as we began to think again about this topic.

Lora Robinson became interested in the topic and wrote a term paper on it for one of my graduate seminars in the spring of 1967, a paper which suggested certain content categories for measuring morale in colleges and universities, and developed about 300 items which might be relevant to the various categories. Among the potentially relevant items were some which came from my College and University Scales (CUES); and this, in turn, led to the particular study which Lora Robinson and Richard Seligman have conducted and reported in the present monograph.

Their study shows that it is possible to score a subset of 22 items in CUES to produce a morale score. The score is reliable,

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1. Moran, Roger. An Analysis of Industrial and Military Morale Research with Implications for Assessment of Morale on College and University Campuses. Unpublished doctoral dissertation, Syracuse University, 1954.

reveals large differences between institutions, is related to other information about the institutions in ways that are generally supportive of its validity and meaning, and has a range of content that reflects, at least minimally, most of the aspects of morale which Robinson and Seligman have defined.

Since several hundred colleges and universities have used CUES during the past few years, it is now possible for them to review their data and compute a morale score for their institution. In this way the concept and measurement of campus morale can be widely applied, discussed and debated.

The morale scale derived from CUES is not a measure of individual student morale. Rather, it is an index of campus morale. It consists, operationally, of the number of "morale relevant" statements which are seen as characteristic of the institution, with characteristic defined as consensus among reporters by a margin of two to one or greater.

The UCLA Center for the Study of Evaluation of Instructional Programs has among its goals the identification and measurement of new and better variables along which instructional programs need to be described if they are to be evaluated more adequately. In the present study we regard the total institution (college or university) as a large instructional program; and we regard morale as an aspect or variable within the educational environment which potentially affects the attainment of educational objectives. It is one way of describing the context or setting in which learning and development are promoted--a high morale context or a low morale context. The value of this "contextual

variable" ultimately will be judged by those who use it in further studies of higher education. Because it looks promising, we recommend its use.

C. Robert Pace

THE MEASUREMENT OF CAMPUS AND STUDENT MORALE

Lora Robinson and Richard Seligman

A major undertaking of the Center for the Study of Evaluation of Instructional Programs is the investigation of contextual variables which define important aspects of institutional environments. A number of activities in the Center's higher education program are devoted to the development of instruments to measure environmental contexts which might have a significant relationship to institutional effectiveness. One such aspect of the environment which has heretofore received minimal attention is morale. The present report deals with the initial research on institutional morale and describes the development of a tool for measuring this contextual variable.

Historically, social scientists were concerned with the morale of individuals. They employed attitude and personality items to develop scales for measuring individuals' reactions to the social crisis of the depression years. A new focus on morale came about through the famous Hawthorne studies in 1939. This research provided industry with a deeper appreciation for the motivational properties of social relationships on the job. Morale was the construct used to describe the psychological state of the group which significantly affected productivity. Thus, in the past, morale, a hypothetical construct, has been useful in helping to

account for intergroup differences in effectiveness. If such a construct has been useful to industry as a significant mediating variable affecting productivity, it may be a significant variable affecting both the process and product of higher education. There are, however, no widely used tests which purport to measure college student morale. With this as the major justification for investigating this construct, the next step was to derive a description of morale from which an operational definition might stem.

Attempts were made to achieve a working definition of morale which would be especially pertinent to the educational framework in general and college students in particular. The literature concerning morale was reviewed and a broad definition of morale was adopted:

> .....Morale refers to the motivation and behavior of group members toward group goals.....Campus morale refers to the level of motivation existing in students, faculty, and administration to work cooperatively to promote educational and social development of the students.....(Moran, 1954, p. 193)

Then the literature was reexamined in order to identify the primary or most common content categories of morale which appeared in various articles. These categories would provide the framework for selecting and writing test items. The categories selected were the result of inspecting literature in three areas: employee morale in industry, student morale in education, and studies of teacher morale. The categories which resulted were:

1. General satisfaction
2. Attitudes toward school administration and policies

3. Satisfaction with the intrinsic aspects of the educational task

4. Attitudes toward instructors

5. Attitudes toward the satisfaction of aspirations

6. Satisfaction with the physical aspects of the educational setting

7. Satisfaction with costudents

8. Openness of communications

9. Attitudes toward the environment external to the college.

The nine categories represent an attempt to translate the content of prior literature on morale into the setting of the college environment. The efficacy of this translation is suggested since the content characteristic of morale research, to which Pace has referred in his introduction, can be subsumed under these nine categories. For example, the category identified as "General satisfaction" is representative of the notion of pride in one's outfit, or espirit de corps found in the military studies. "Attitudes toward school administration and policies" reflects the expectation that individuals will receive fair treatment. Under the heading "Satisfaction with intrinsic aspects of the educational task," one can associate the notion of the importance of the mission, suggested in military research. Under this same heading one can include several factors from industrial research: the job is responsible; it possesses prestige; it is not monotonous; one can work within his abilities. The category "Attitudes toward instructors" represents the translation into an educational frame of reference of the idea of attitudes towards officers or superiors, as well as the notion that good work is appreciated and rewarded.

Opportunity for advancement, and opportunity for initiative are represented in the present setting under the category "Attitudes toward the satisfaction of aspirations." In the college setting, the notion of working with pleasant people becomes "Satisfaction with costudents." Finally, the feeling that one's friends approve of one's job is viewed in terms of "Attitudes toward the environment external to the college." The nine content categories employed in the present research, thus, reflect previous concepts of morale in a new setting--the college environment.

Next, items in various morale tests (none of student morale) were examined. The items were reworded to apply to an educational institution. After each item was reworded it was classified into one of the nine content categories. Additional items were also written. Since the College and University Environment Scales (CUES) measure various aspects of the college environment, its items were also inspected; it was felt that certain characteristics of the institution would be related to, i.e., foster or inhibit, student morale. Thus, the items which were judged to be related to student morale were also classified into the nine content categories. Some 300 items from the various sources were classified under the nine categories. These items comprise a potential item pool from which one or more scales for measuring morale can be compiled, pretested, and refined.

It is from the initial effort to relate CUES items to student morale that the following research ensued. The current investigation was formulated within the limits of the study of college and university environments conducted by Pace (1967). Among the items

in Pace's College and University Environment Scales are some which were thought to be related to institutional morale. The specific goal of the present study, therefore, was to determine if one could measure institutional morale using selected items from CUES. A more general purpose was to lay the groundwork for the development of other instruments for the assessment of student morale. Since data on CUES items were available from a norm group of 100 institutions, preliminary work on the possibility of assessing institutional morale could be done. Although the items selected for the CUES morale scale are not representative of all the nine content dimensions outlined above, it is felt that the resulting combination does measure an aspect of the college environment which might be labelled morale. Why we felt justified in asserting this will be detailed after a look at data from our invesitgation.

Procedures

Since CUES were not originally intended to assess institutional morale, a method of determining morale-relevant items was needed. Use of the nine content categories which had been developed seemed most feasible. Thus each CUES item was inspected to determine if its content was related to one or more of the nine morale content categories. Of the original 150 CUES items, 55 were chosen as bearing most directly on institutional morale.

For example, the item, "The school helps everyone get acquainted," may be viewed as an aspect of morale which could be subsumed under the category of general satisfaction. At the same time, however, it is a function of school policy, the

communication system, and the relationships between students, putting it in categories two, eight, and seven simultaneously. Other items presented us with similar difficulties with the result that few items could be limited to a single category. "When students run a project or put on a show, everybody knows about it" might be put in categories one, five, or eight. In the end, the nine content categories were used basically as an aid in selecting items related to institutional morale rather than as a rigid classification system. Still, some categories, simply because of the nature of the CUES test, were underrepresented in terms of the number of items in the morale scale. This is relatively unimportant at this stage and will be remedied when a morale test separate from CUES is developed. More important is the fact that all the items selected from CUES for consideration were in some way related to student morale and form a scale which may be useful when one is concerned about institutional morale.

Although CUES data were available on a great number of institutions, we decided to use Pace's norm group of 100 institutions (Pace, 1967) for our study. In this way the sample would be the same as that used in the bulk of recent work done with CUES. Further, the decision saved us duplication of effort during the data processing and analysing. The norm group was selected to "...reflect a broad cross-section of American higher education--from all parts of the country, large and small, public and private--and ... at the same time [to] include representative institutions from each of several categories or types which are known to differ substantially from one another" (Pace 1967, p. 11). In this sense

the norm group is a stratified rather than a random sample. It was selected rationally to represent significant elements of institutional differences, and, therefore, it may be conceived of as a baseline or standard reference group of institutions.

Each of the 100 colleges which comprise Pace's norm group was given a morale score based on responses to the 55 items initially identified. Although the keyed direction for five of the CUES items was changed, the same scoring method was used, i.e., 66+/33- (Pace, 1967). Scoring consisted of adding the number of items answered by two-thirds or more of the students in the keyed direction, subtracting the number of items answered by one-third or fewer of the students in the keyed direction (i.e., by two-thirds or more in a direction opposite to the key) and adding 55 points to the algebraic difference between the two above numbers in order to eliminate any negative scores. For the 100 institutions scored in this manner, some characteristics of the obtained distribution are: Range 33-102; Mean = 60.24; SD = 13.05. These figures indicate that there is a differentiation being made among institutions.

With the 55 items as a starting point, it was essential that the morale scale be reduced to a more manageable size with a more concise definition. The decision to retain an item in the final scale was based on a consideration of three criteria: at least .40 correlation with the morale score, inclusion in the revised edition of CUES, and content relevant to the initial definition of morale. All criteria were met for every item except Item One. In this case, the item was retained primarily on the basis of content even though its correlation with the morale score was less than .40.

The first step in this procedure was to construct a correlation matrix comprising all 150 CUES items and the morale scores. Looking first at the original 55 items, it was possible to eliminate 20 which correlated less than .40 with the morale score. Eight of the remaining 35 items were dropped because they will not appear in the forthcoming second edition of CUES. The remaining 27 items were examined with considerable care, resulting in the further elimination of 11 items judged weak on the basis of content. Thus, 16 of the original 55 items were retained. In a like manner, the CUES items not included in the original morale scale were examined. Once again, three criteria were employed: at least .40 correlation with the morale score, inclusion in the revised edition of CUES, and content relevant to the initial conceptualization of morale. On this basis it was possible to select six items to be included in the new morale scale. The final morale scale, thus, contains 22 items--16 from the original scale and six additional items.

A new morale score was derived for each of the 100 institutions by following the same scoring method described previously, except that the constant added was 22 instead of 55. Only one item was scored in a direction keyed opposite from CUES. Properties of the new distribution are: Range 8-43; Mean = 24.86; SD = 7.46. (A distribution of all the institutions' scores and their percentile ranks is included in the Appendix.) Again a distribution which discriminates among institutions on the morale dimension was obtained.

The initial morale score correlated .95 with the final morale score, suggesting that the 22 items measure essentially the same

dimension as the original 55. Of course, the extent to which the initial and final morale scales correlate is dependent on the fact that there are items common to both. To get some idea of the degree to which the obtained correlation is spurious, we correlated the 22-item morale score with one based on the 55 items minus the 16 common items. The correlation between the 39 and 22 item scales was .88. Thus, we feel safe in asserting that the 22 items measure essentially the same dimension as the original 55.

Reliability

An estimation of the reliability of the 22-item scale was obtained using the Kuder-Richardson formula 21. The reliability of the scale is estimated at .82. This value is comparable to those obtained for the other scales in CUES (Pace, 1967).

Psychometric Data

Table I shows each of the 22 items and their correlation with the 22-item morale scale score. The relationship between the items and the test score is high with a median of .66.

Table II summarizes the relationship between the 22-item morale scale score and the CUES scale scores. The correlations between the morale scale and CUES scales are partly a function of the number of items selected from each CUES scale. For example, the highest and lowest correlations correspond to those scales from which the most and least items were taken. Because of the .80 correlation between morale and Community, one might be tempted to dismiss the morale scale as merely a replication of the Community scale. There is, however, some support for the distinct nature of the

TABLE I

CORRELATION OF ITEMS WITH MORALE SCORE (N = 100)

Item		Morale
1.		.34
2.	(F)	.51
3.		.66
4.		.69
5.		.77
6.		.76
7.		.60
8.	(F)	.57
9.		.75
10.		.63
11.		.67
12.		.62
13.		.74
14.	(F)	.72
15.		.72
16.		.66
17.	(F)	.70
18.	(F)	.63
19.		.76
20.		.58
21.		.70
22.		.62

Median = .66

TABLE II

RELATIONSHIP BETWEEN CUES AND MORALE

CUES Scales	Correlation with Morale Scale	Number Items from CUES Scales
Practicality	.05	2
Community	.80	8
Awareness	.55	5
Propriety	.67	3
Scholarship	.61	4
		22

Median = .61

morale scale when considered in the context of an intercorrelation matrix of the CUES scale scores. In Table III one can see that morale is unique in that it correlates positively with all scales and highly with all except Practicality. None of the CUES scales follows this same pattern of relationship. The Community scale in particular has a high positive correlation only with the Propriety scale. Thus, the morale scale seems to incorporate aspects from four of the five scales but is not entirely defined by any of the five.

For further understanding of the meaning of a scale purporting to measure the construct, morale, one must look at additional properties of the scale. For this, several analyses are relevant. First, a factor analysis was done using a computer program which performs a principal component solution and an orthogonal rotation of the factor matrix. Five principal factors were found. Four of the five were defined in terms of items principally from one of the CUES scales. The content of the items, however, suggested a different label from those of the CUES scales. Factor one is called Students' Freedom of Expression, and five of the six items come from the CUES Awareness scale. (For a complete listing of each factor and the items which comprise it, see the Appendix.) Factor two is labelled Assimilation into Campus Life, and all of the items come from the CUES Community scale. Factor three is called Group Cohesiveness and consists of two items, each from separate CUES scales. Factor four is called Commitment to Intellectual Goals, and four of the five items come from the Scholarship scale. Factor five is labelled Identification with

TABLE III

INTERCORRELATIONS BETWEEN MORALE AND CUES SCALES

	Morale	Practicality	Community	Awareness	Propriety	Scholarship
Morale						
Practicality	.05					
Community	.80	.17				
Awareness	.55	-.34	.09			
Propriety	.67	.10	.53	.01		
Scholarship	.61	-.50	.12	.56	.12	

Social Norms, and all the items come from the CUES Propriety scale.

Although four of the five factors obviously are related closely to CUES scales (i.e., they consist of items from primarily one of the five scales), each seems to pinpoint a more specific aspect of the environment than the CUES scale from which is originated, and each is meaningful in terms of our conceptual framework which has defined morale. The scale of 22 items seems to be measuring a construct, morale, which is complex in nature. The five factors then are elements of the construct which combine to give a single measure of the variable, morale.

Still another way to determine what is being measured by the morale scale is to look at those items which best describe a high-morale environment. This analysis was accomplished by looking at the responses characteristic of the top-scoring 25 institutions. Further analyses were undertaken employing the top-scoring ten institutions. Two criteria were employed in selecting items judged best in describing high morale environments. First, at least two-thirds of the students in at least 20 of the top 25 institutions had to respond to a particular item in the same manner. Second, in no case among the top 25 institutions could there be a consensus in the opposite direction for the same item. Using these criteria, seven items were found that are always true of at least 20 of the top 25 institutions (items marked * are also true of at least eight of the top ten institutions).

*1. The professors go out of their way to help you.

2. Many upperclassmen play an active part in helping new students adjust to campus life.

3. Most of the faculty are interested in students' personal problems.

*4. A controversial speaker always stirs up a lot of student discussion.

*5. The expression of strong personal belief or conviction is not rare around here.

*6. Students pay attention to rules and regulations.

*7. Most professors are very thorough teachers and really probe into the fundamentals of their subjects.

Using the same criteria, we found two items that were always true of the top ten institutions, although not true of at least 20 of the top 25.

1. Many students develop a strong sense of responsibility about their role in contemporary social and political life.

2. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics.

Thus, in institutions described as having high morale, one would expect to find the faculty demonstrating an interest in students, the quality of teaching to be generally high, an interest in controversial issues and the expression of ideas, attention to rules and regulations, and an interest among the older students in assisting newcomers. Our data indicate that these characteristics are nearly always true of high-morale institutions and are only rarely true of low-morale institutions.

Similarly, we sought to identify items which were generally characteristic of low-morale environments. Once again, the criteria employed were (a) agreement on a given item among at least two-thirds of the students in at least 20 of the bottom 25 institutions, and (b) no instance of consensus in the opposite direction.

Using these criteria, only one item was selected. An additional item, which only narrowly missed the criteria, is included. Both items were true of eight of the ten bottom institutions as well.

1. Students do not exert considerable pressure on one another to live up to the expected codes of conduct.
2. Students do not put a lot of energy into everything they do--in class and out.

Thus in an environment judged to have low morale, one would expect to find an absence of peer pressure to conform to expected standards of conduct and, in addition, to find little energy among students in their activities both in and out of class. Our data suggest that these characteristics are almost always true of low-morale institutions, but only rarely true of high-morale institutions.

It is of some interest to note the way in which the morale scale differentiates among institutions of diverse types. In the present study we employed Pace's typology (1967, pp. 9-14) and classified the institutions in our sample into his eight categories:

1. Highly Selective Liberal Arts Colleges(SLA).
   Institutions so classified are private, nonsectarian colleges such as Radcliffe, Swarthmore, and Antioch.
2. Highly Selective Universities (HSU).
   Institutions in this category include both public and private universities of which Princeton, Stanford, and UCLA are representative.
3. General Liberal Arts College (GLA).
   This category includes private, nonsectarian colleges, as well as church-related colleges with a moderate religious emphasis, and is typified by institutions such as Albion, Colgate, and Lafayette.
4. General Universities (GU).
   Included in this category are most major state universities as well as several private institutions, e.g., Penn State, Texas Christian, and Rutgers.

5. State Colleges and Other Universities (SC).
   This category comprises public institutions such as Brooklyn College, San Diego State, and Oregon State.

6. Teachers Colleges (TC).
   Included here are institutions whose major emphasis is on teacher training, such as Ball State, Slippery Rock, and Marshall.

7. Strongly Denominational Liberal Arts Colleges (DEN).
   This category includes church-related colleges with a strong religious emphasis, e.g., Oklahoma Baptist, Manhattanville, and Mount St. Mary's.

8. Engineering and Science (ES).
   The final category includes both public and private institutions such as Purdue, Rensselaer, and Carnegie Tech, where the major emphasis is on the technological and scientific fields.

Figure 1 shows the ranges and means of the morale scores for each of the eight institutional types described above, as well as for the total sample of 100 institutions. Several features of this distribution are notable. All of the highly selective liberal arts colleges (SLA) are found above the mean for the entire group. Most of the strongly denominational liberal arts colleges (DEN) are found above the mean, and none is more than one or two points below the mean. The general liberal arts colleges (GLA) are widely distributed in terms of their morale scores. While all the institutions in this category are similar with respect to size, i.e., student bodies of no more than three thousand, they are vastly different in terms of institutional morale.

The general universities (GU) and the highly selective universities (HSU) cluster around the mean, with no institutions having extreme scores. A similar situation exists for the teachers colleges (TC), except that they have a slightly larger range. Both the engineering and science institutions (ES) and the state colleges (SC) show wide ranges on the morale scale

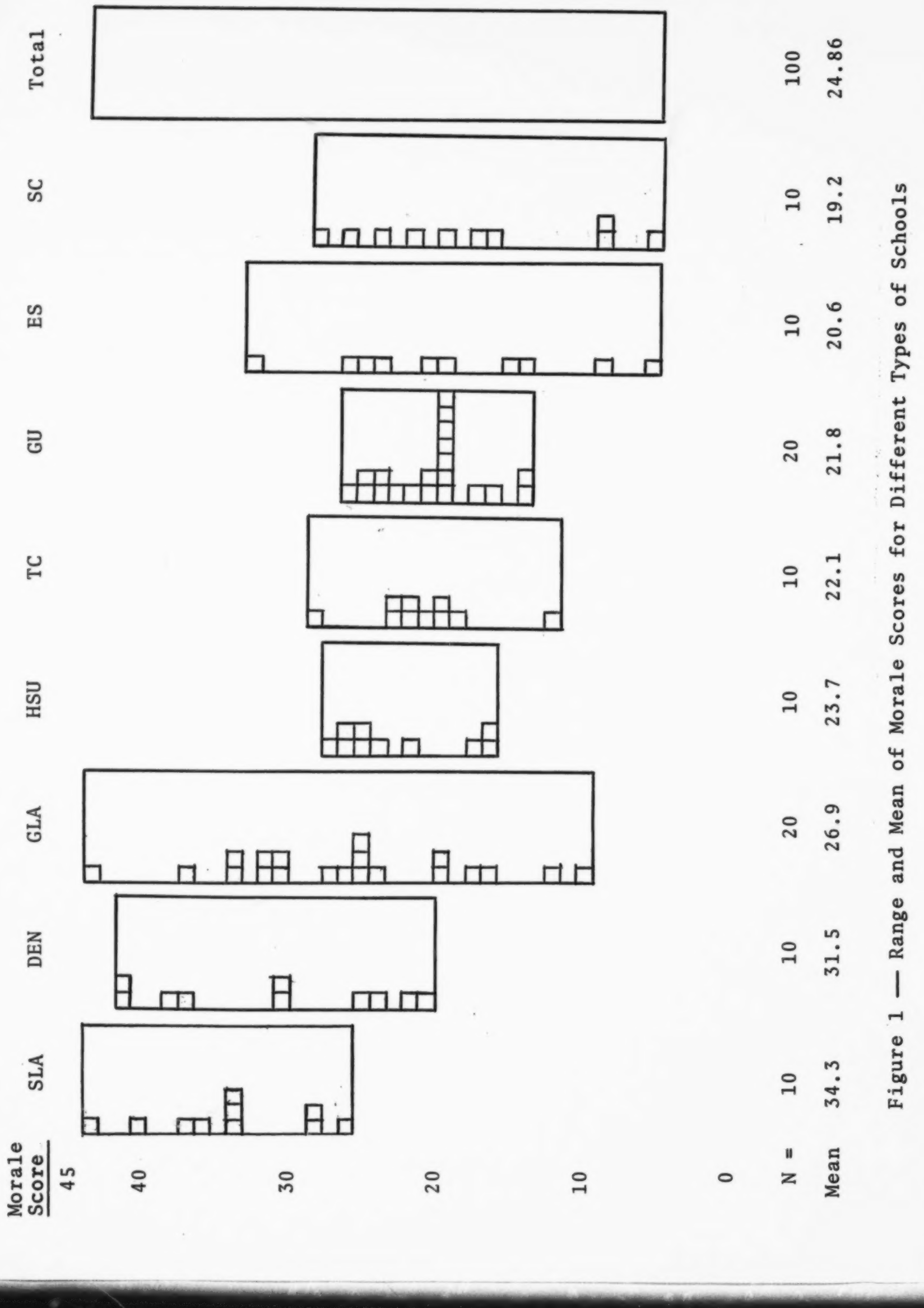

Figure 1 — Range and Mean of Morale Scores for Different Types of Schools

Here again, one finds considerable differences in morale among institutions of similar size. It has thus been shown that the morale scale discriminates among institutional types, as well as among individual institutions of a similar size.

Validity

In order to obtain information on the validity of the morale scale, the morale scores were correlated with measures of various characteristics of students and institutions. These data were also used by Pace his Analyses of a National Sample of College Environments, 1967. For a detailed explanation and description of the data available, the reader is referred to this report. We did not use all of the sources of data available to us; rather, items of interest, i.e., those which we felt might be related to institutional morale, were selected. This method of selection was chosen primarily because our work was viewed as exploratory. We used data on student characteristics from Astin's study (1965) and from the National Opinion Research Center's (NORC) survey of 1961 graduates. Data on institutional characteristics were obtained from Astin's studies (1962, 1965).

Table IV summarizes the correlations between the morale scale and Astin's variables. The first section of the table presents the relationships obtained between the morale scale and Astin's Institutional Characteristics. Morale correlates significantly with three of the five institutional characteristics, Size (enrollment), Masculinity (percentage of men in student body) and Realistic (degree of technical emphasis).

The second part of the table contains the correlations between the morale scale and Astin's Freshmen Input Variables. These were developed by Astin to provide a scheme for describing the major distinguishing characteristics of entering freshmen classes. Each is based on characteristics of incoming freshmen, including information concerning their past achievements and future career plans. Morale correlates significantly with four of the five Freshmen Input Variables. Pragmatism (plan technical careers) and Masculinity (percentage of men in freshmen class) parallel the institutional characteristics of Realistic and Masculinity above. In addition, morale correlates significantly with Estheticism (plan arts and literature careers) and Status (plan law, political, and executive careers).

The third section of the table shows the relationship between morale and the variables in the Environmental Assessment Technique. Five of the eight correlations are significant. Again morale correlates negatively with Size. Further, it correlates with four of the six Personal Orientations which reflect the proportions of baccalaureate degrees awarded by the institution in various fields of study.

The correlations between the morale scale and NORC data provide the more telling test of the validity of the new morale scale. Table V provides a summary of the correlations between the morale scale and selected items from the NORC, 1961, data. Several questions cover topics that are specifically related to those aspects of the college environment which one would expect to be affected by institutional morale. Question two of the NORC data elicits

TABLE IV

CORRELATIONS BETWEEN MORALE SCALE AND ASTIN'S VARIABLES

1.	Institutional Characteristics		
	a. Affluence	.20	(N = 61)
	b. Size	-.40*	"
	c. Masculinity	-.30**	"
	d. Homogeneity	.06	"
	e. Realistic	-.41*	"
2.	Freshmen Input Variables		
	a. Intellectualism	.05	(N = 100)
	b. Estheticism	.23**	"
	c. Status	.26*	"
	d. Pragmatism	-.45*	"
	e. Masculinity	-.32*	"
3.	Environmental Assessment Technique		
	a. Selectivity	.12	(N = 100)
	b. Size	-.45*	"
	c. Realistic	-.36*	"
	d. Scientific	.09	"
	e. Social	.20**	"
	f. Conventional	-.20**	"
	g. Enterprising	.14	"
	h. Artistic	.30*	"

Personal Orientations

(*p $\leq$ .01)
(**p $\leq$ .05)

feelings about the students' attitudes toward their particular college environment. As expected, morale is significantly related to the number of students expressing attachment to their college.

Morale was related to the number of students who felt that the educational goal of understanding and appreciation of ideas was important. It was also related to the percentage of students who rated the caliber of classroom teaching as excellent. Further, institutional morale was related to the number of students who participated in more than one extracurricular activity. Thus, we find that morale is related to more than one aspect of the college environment. It is related to both the academic and nonacademic spheres of the environment and to students' feelings about their environment.

One other feature of Table V should be noted. Items 5 through 12 are all negatively related to morale. The responses to these items are determined primarily by the size of the institution. The variable of institutional size seems to be confounding any relationship between morale and these particular institutional characteristics. Despite this limitation, we feel that both the variety in, and the specific nature of, the characteristics which do correlate significantly with morale suggest that it is useful in assessing this aspect of the college environment.

Discussion

The discussion of the meaning and importance of our research will focus on an attempt to answer three questions: (a) What is the morale score? (b) What does it tell us about an institution? (c) What are its uses?

TABLE V

CORRELATIONS BETWEEN THE MORALE SCALE AND NORC DATA (N = 41)

NORC Questions	Correlation
1. Importance of discussions with academic advisor and faculty in developing career plans.	.22
2. What is your emotional feeling about your college or university?	
a. Attachment strong	.66*
b. Attachment weak	-.48*
3. The purposes and results of college most important to me personally are understanding understanding and appreciation of ideas.	.45*
4. The purposes and results of college most important to the typical student here are understanding and appreciation of ideas.	.60*
5. Number of professional staff for general administration.	-.36**
6. Number of professional staff for student personnel.	-.22
7. Number of faculty for resident instruction with rank of instructor or above, full-time.	-.21
8. Number of faculty for resident instruction with rank of instructor or above, part-time.	-.33
9. Number of faculty for resident instruction, in degree-credit courses, junior instructional staff (teaching assistants, etc.).	-.22
10. Number of faculty giving nondegree courses, extension faculty included.	-.12
11. Number of professional library staff.	-.14

TABLE V (continued)

12.	Number of staff for organized research.	-.14
13.	Percentage of students indicating participation in one or more activities.	.52*
14.	Percentage of students not regularly employed during the academic year.	.07
15.	Percentage of students who rated the following aspects as "excellent":	
	a. Caliber of classroom teaching.	.36**
	b. Facilities and opportunities for research including library.	.04
	c. Caliber of students.	.34
	d. Knowledge and professional standing of the faculty.	.14

(*$p \leq .01$)

(**$p \leq .05$)

What is the morale score? As presently constituted, the morale scale comprises 22 items drawn from all five scales of CUES. Although this scale contains items from the five CUES scales, it has been shown to operate in a manner slightly different from each of them. The morale scale, furthermore, has been shown to be reliable in distinguishing among diverse institutions. Correlates with other characteristics of the college environment contribute to the scale's validity in measuring morale.

Morale, as measured by the present scale, is related to both academic and nonacademic elements of the college environment. This feature of the scale was demonstrated, in particular, in the correlations with the NORC data. Morale demonstrated a significant relationship to students' feelings about the nature of the educational experience, as well as to students' indications of their participation in out-of-class activities.

The current measure of morale is unquestionably related to institutional size. Among the top-scoring 25 institutions, none had a student body larger than 5,000. The bottom-scoring 25 institutions, however, included both small and large colleges. Thus, one must conclude that size is an important element in campus morale, but that small size alone does not guarantee high morale.

The morale scale derived from CUES measures "institutional" or "campus" morale as opposed to "student" morale. In the present study, morale has been conceptualized as a contextual variable--an environmental characteristic. Respondents are asked to act as reporters on the state of the institution--what kind of place

is it? The questions are worded so that the respondent endorses them as being true or not true about his school. This results in a student's having to decide, as objectively as possible whether an item is characteristic of his institution.

In our future research, the student will be asked to give his his own opinion, rather than an "objective" view, in response to questions about his school. Hopefully, a summation of student body opinions will result in a description of the environment similar to the one obtained from students acting as reporters. This is an empirical question which, while meriting further study, is separate from the goal of devising an instrument to assess a given dimension or construct.

Given an institution with a high morale score, what can one tell about that institution? On the basis of the present study, one would be likely to assume that the institution is small. One would also be able to make judgments about the curricular offerings of the institutions. It would be unlikely that such an institution would emphasize what Astin has referred to as a "realistic" orientation. That is, high-morale institutions tend not to be associated with curricula heavily weighted in the technological area. One would not expect a large proportion of degrees to be granted in either the business or technological fields. Rather, one would expect to find a large proportion of degrees awarded in the humanities, social sciences, and liberal arts. In a high-morale institution, one would expect to find an emotional attachment to the institution among students, as well as the feeling that a significant goal of education is the appreciation of ideas

Although the institutional score provides the general information summarized above, the 22 items in the scale could be inspected to determine the particular elements in the environment which contributed to campus morale.

What are the uses of the morale scale described in this monograph? The morale scale enables one to make several comparisons. First, it enables one to compare the morale level (high, medium, low) at a particular institution with that obtained at similar institutions, e.g., highly selective liberal arts colleges. Second, it permits comparisons between a single institution and a norm group representative of a wide variety of institutions in the United States. Third, it provides diagnostic information on those elements of the campus environment which define the construct morale as employed in the present study.

For the several hundred colleges and universities which have administered CUES, as well as for those which will do so in the future, it is now possible to obtain information about the institution's morale. The morale score can be computed by examining the 22 items which are listed, along with their key, in the Appendix. Thus, further information about the campus environment is provided through the use of a standardized instrument which has received wide distribution throughout the country.

Another potential use of the morale scale may be found in the research on the outcomes of higher education. In previous research in industry and the military, morale was related to performance, i.e., good morale is associated with good performance. Good morale has not been typically regarded as a purpose or goal

of higher education. Rather, it has been viewed as an intervening or mediating variable thought to have some relationship to the outcomes of higher education. The development of the morale scale described in this monograph makes possible innumerable studies on the relationship between institutional morale and the outcomes of higher education, whether viewed in such terms as grades, persistence, or acquisition of attitudes.

Summary and Conclusion

Although a useful construct in industrial and military research, morale has received only minimal consideration within the framework of higher education. The present study was concerned with the development of a scale for the measurement of campus morale in colleges and universities. A second objective of this research was to lay the groundwork for the development of instruments to measure student morale.

On the basis of nine content categories, derived from an extensive examination of the literature on morale, items for the morale scale were selected from Pace's College and University Environment Scales (CUES). The population employed in the development of the morale scale included 100 colleges and universities broadly representative of higher education in the United States.

The initial morale scale of 55 items was subsequently reduced to 22 items without substantially changing the dimension being measured. The scale was found to discriminate among the 100 institutions, and its reliability was acceptable. The psychometric data reported for the morale scale included item-scale correlations, correlations of morale and CUES scales, comparisons of CUES and

morale scores in terms of the ranges and means reported for each of the eight institutional types described by Pace. A factor analysis of the morale scale yielded five factors which further contribute to our understanding of this construct.

The validity of the morale scale was suggested in terms of correlations with items from Astin's research as well as the 1961 NORC study. Finally, the discussion focused on a consideration of the information which one obtains from the morale scale as well as the potential uses of the scale.

We feel that our approach to the assessment of institutional morale using selected items from the College and University Environment Scales not only provides the conceptual groundwork for the measurement of the construct, morale, but also identifies a scale of 22 items as a means for assessing morale in the college environment.

Although selected CUES items have been shown to be useful in the assessment of morale, we believe that this contextual variable merits further research. With the CUES data as a beginning step, we propose to develop scales designed specifically to assess student body morale.

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APPENDIX

DISTRIBUTION OF MORALE SCORES

Score	Institution	Percentile
44		
43	2	100
42		98
41	2	98
40	1	96
39		95
38	1	95
37	3	94
36	1	91
35		90
34	5	90
33	1	85
32	2	84
31	4	82
30		78
29	4	78
28	2	74
27	7	72
26	8	65
25	8	57
24	3	49
23	6	46
22	5	40
21	13	35
20	1	22
19	4	21
18	5	17
17	1	12
16	3	11
15		8
14	2	8
13		6
12	1	6
11	3	5
10		2
9		2
8	2	2
7		
6		
5		
4		
3		
2		
1		
0		

Mean 24.86
Sigma 7.46
N = 100

FACTOR I

STUDENTS' FREEDOM OF EXPRESSION

Morale Scale Items	Loading
1. Students have many opportunities to develop skill in organizing and directing the work of others.	.56
2. Channels for expressing students' complaints are readily accessible.	.63
3. A controversial speaker always stirs up a lot of student discussion.	.79
4. Many students here develop a strong sense of responsibility about their role in contemporary social and political life.	.81
5. The expression of strong personal belief or conviction is pretty rare around here. (F)	.76
6. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics.	.83

FACTOR II

ASSIMILATION INTO CAMPUS LIFE

Morale Scale Items	Loading
1. The professors go out of their way to help you.	.88
2. Many upperclassmen play an active role in helping new students adjust to campus life.	.80
3. When students run a project or put on a show everybody knows about it.	.75
4. Students exert considerable pressure on one another to live up to the expected codes of conduct.	.53
5. Most of the faculty are not interested in students' personal problems. (F)	.85
6. The school helps everyone get acquainted.	.86

FACTOR III

GROUP COHESIVENESS

Morale Scale Items	Loading
1. The big college events draw a lot of student enthusiasm and support.	.90
2. There is a lot of group spirit.	.83

FACTOR IV

COMMITMENT TO INTELLECTUAL GOALS

Morale Scale Items	Loading
1. Anyone who knows the right people in the faculty or administration can get a better break here. (F)	.65
2. Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects.	.71
3. Students set high standards of achievement for themselves.	.89
4. Students put a lot of energy into everything they do--in class and out.	.81
5. Most courses are a real intellectual challenge.	.92

FACTOR V

IDENTIFICATION WITH SOCIAL NORMS

Morale Scale Items	Loading
1. Students are conscientious about taking good care of school property.	.80
2. Students pay little attention to rules and regulations. (F)	.79
3. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others. (F)	.76

MORALE SCALE ITEMS

	CUES Item Number	
1.	78	The big college events draw a lot of student enthusiasm and support. (T)
2.	84	Anyone who knows the right people in the faculty or administration can get a better break here. (F)
3.	36	The professors go out of their way to help you. (T)
4.	40	Students have many opportunities to develop skill in organizing and directing the work of others. (T)
5.	42	Many upperclassmen play an active role in helping new students adjust to campus life. (T)
6.	111	When students run a project or put on a show everybody knows about it. (T)
7.	114	Students exert considerable pressure on one another to live up to the expected codes of conduct. (T)
8.	115	There is a lot of group spirit. (T)
9.	117	Most of the faculty are not interested in students' personal problems. (F)
10.	119	The school helps everyone get acquainted. (T)
11.	54	Channels for expressing students' complaints are readily accessible. (T)
12.	60	A controversial speaker always stirs up a lot of student discussion. (T)
13.	123	Many students here develop a strong sense of responsibility about their role in contemporary social and political life. (T)

MORALE SCALE ITEMS (continued)

	CUES Item Number	
14.	130	The expression of strong personal belief or conviction is pretty rare around here. (F)
15.	134	There is considerable interest in the analysis of value systems, and the relativity of societies and ethics. (T)
16.	70	Students are conscientious about taking good care of school property. (T)
17.	137	Students pay little attention to rules and regulations. (F)
18.	149	Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others. (F)
19.	17	Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects. (T)
20.	22	Students set high standards of achievement for themselves. (T)
21.	30	Students put a lot of energy into everything they do--in class and out. (T)
22.	98	Most courses are a real intellectual challenge. (T)

OE 6000 (REV. 9-66)

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TITLE

"The Measurement of Campus and Student Morale"

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INSTITUTION (SOURCE)
UCLA - CSEIP

SOURCE CODE

REPORT/SERIES NO.

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SOURCE CODE

OTHER REPORT NO. Technical Report No. 4

OTHER SOURCE

SOURCE CODE

OTHER REPORT NO.

PUB'L. DATE April-1968

CONTRACT/GRANT NUMBER OEC 4-6-061646-1909

PAGINATION, ETC.

32 numbered pages - text

RETRIEVAL TERMS

IDENTIFIERS

ABSTRACT

Items for a morale scale were selected from Pace's College and University Environment Scales. The initial morale scale of 55 items was reduced to 22 items without substantially changing the dimension being measured. The scale discriminates among the 100 colleges in Pace's national sample, and its reliability is acceptable. The item-scale correlations, correlations between morale and the CUES scales, and comparisons of CUES and morale scores in terms of the ranges and means for each of Pace's eight institutional types indicate, in general, satisfactory psychometric properties. An item factor analysis of the morale scale yielded five factors. Correlations with items from Astin's research and from the NORC study support the validity of the scale.